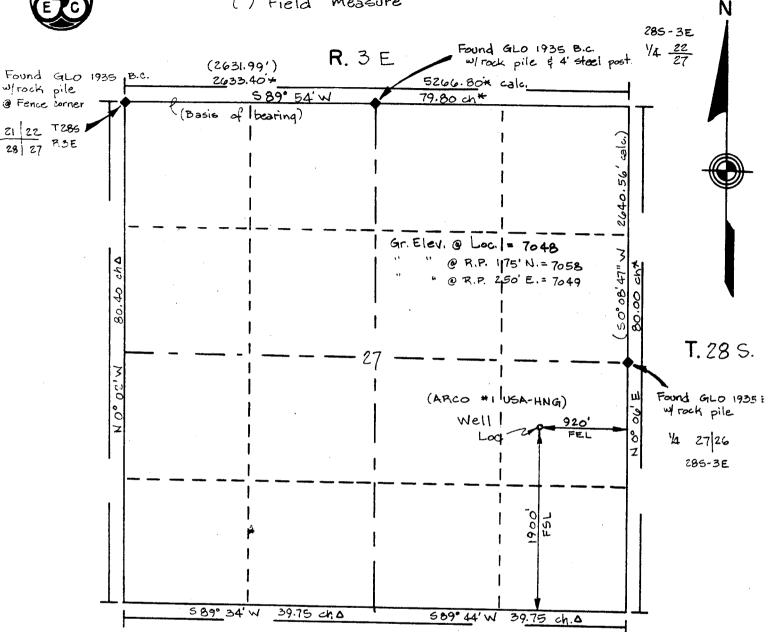
		UTAH OIL	, AND GAS CONSI	ERVATION C	OISSIMMC	ı		
REMARKS: WELL LOG	ELECTRIC LOGS	fileX	WATER SANDS	LOCAT	ON INSPECTE	)	SUB. REPORT/abd.	
		w/		<u></u>				
					<del></del>			
			-					
					1			
DATE FILED 11.	-5-84				· · · · · · · · · · · · · · · · · · ·			
LAND: FEE & PATENTED	STATE LEASE NO.		PUE	BLIC LEASE NO.	U-526	06	INDIAN	
DRILLING APPROVED: 11	-8-84 - Excepti	on locat	ion	,				
SPUDDED IN:					7			
COMPLETED:	PUT TO PROD	DUCING:		tial				
INITIAL PRODUCTION:				W		•		
GRAVITY A.P.I.			· 101	,				
GOR:		T.	100				······································	
PRODUCING ZONES:			NU					
TOTAL DEPTH:			$\nu$					
WELL ELEVATION	7048'6R		· V	1				
DATE ABANDONED:	Moderate	on Res	curder	4-9	.86			
FIELD: WILDCAT								
UNIT:				-				
COUNTY: WAYNE								
WELL NO. ARCO #1	USA-HNG					API #	43-055-30037	
LOCATION 1900' F	SL FT. FROM (N) (S) LINE	9201	FEL F	T. FROM (E) (W)	LINE.	NE SE		27
TWP. RGE.	SEC. OPERATOR			TWP.	RGE.	SEC.	OPERATOR	
				200				
				28\$	3E	27	ARCO OIL & GAS	CO.

	da y		Ton Sidential
NOTICE OF STAKING (Not to be used in place of Application to Drill Form 9-331-C)	RECEIVED	<b>5. Lease Number</b> U-52606	Y
1. Oil Well Gas Well Other	DIVISION OF OIL GAS & MINING	NA 7. Unit Agreement Na	
2. Name of Operator ARCO Oil and of Atlantic Richfield Company	Gas Company, Division	8. Farm or Lease Nan	18
3. Address of Operator or Agent P.O. Box 5540, Denver, Colorado	80217	9. Well No.	
4. Surface Location of Weil. (Governmental 1/4 or 1/4 1/4) Su 1900' FSL & 920' FEL Sec 27-T28S-R3E (NE/4 SE/4)	rveyed at:	ARCO #1 USA HNG  10. Field or Wildcat Na Wildcat	ime
Attach: Topographical or other acceptances showing location, access road  14. Formation Objective(s) 15. Es	table map , and lease boundaries. timated Well Depth	11. Sec., T., R., M., or Blk and Survey or A Section 27-T28S-R3E	Area
Kaibab @ 3835' Cedar Mesa @ 4545' Redwall @ 5700'	6100'	12. County or Parish Wayne	13. State Utah
<ul> <li>16. To Be Completed by Operator Prior</li> <li>a. Location must staked</li> <li>b. Access Road Flagged</li> <li>c. Sketch and/or map of location, she (To be provided at onsite)</li> </ul>		, reserve pit, cuts, and fil	is ·
17. To Be Considered By Operators Prior a. H <sub>2</sub> S Potential b. Private Surface Ownership c. Cultural Resources (Archaeology) d. Federal Right of Way	to Onsite		
<ul> <li>18. Additional Information</li> <li>a. Attached are the Certified directions to wellsite local</li> <li>b. An archaeology survey has the APD package.</li> <li>c. H<sub>2</sub>S safety equipment will be</li> </ul>	ation. Deen completed, a repor	rt will be made a port	ion of
19. Signed L.B. Morse  due to the nature of this is d. The surface is administered	Title Operations  Jeg Kur  Location although H <sub>2</sub> S is by the BLM.	Jau	10-8-84
e. For any questions regarding Drilling Department at (303	g this permit, please o	contact Ms. Suzanne Ba	rnes of our

\* Record GLO plat 1944 BLM plat 1966 △ Record FORM F-106 ◆ Corner Found () Field measure





Powers Elevation of Denver, Colorado has in accordance with a request from HARRY ENGLE for ARCO OIL & GAS CO. determined the location of ARCO #1 USA-HNG 1900' FSL & 920' FEL of Section 27 Township 28 South Range 3 East of the SALT LAKE Meridian WAYNE County, UTAH

Scale ... I" = 1000'

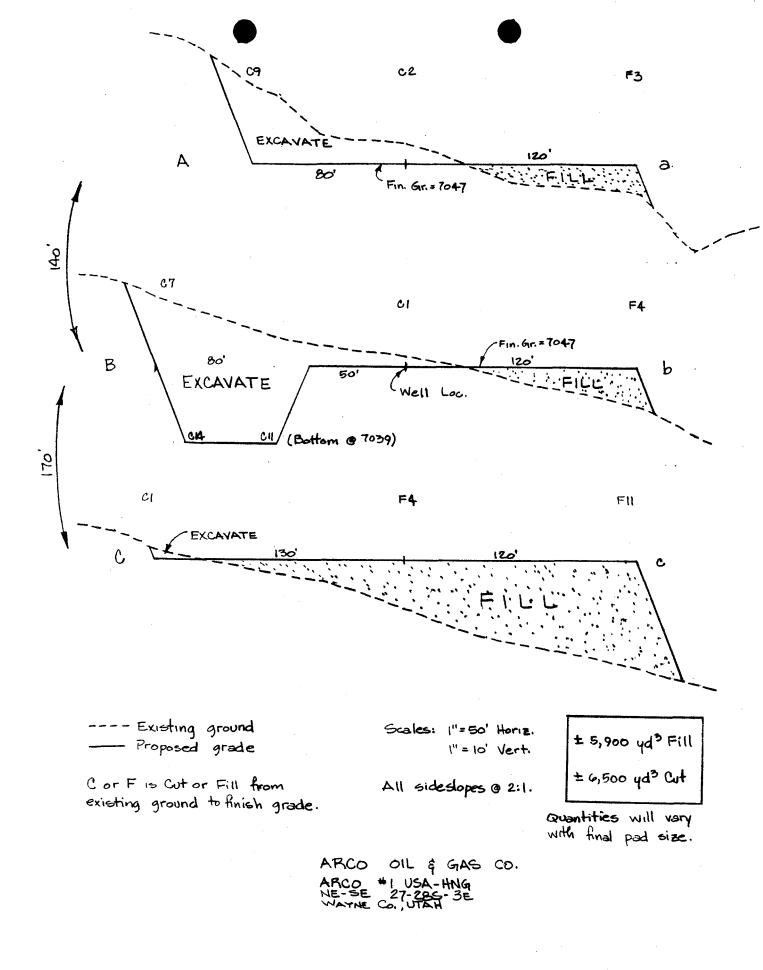
I hereby certify that this plat is an accurate representation of a correct survey showing the location of

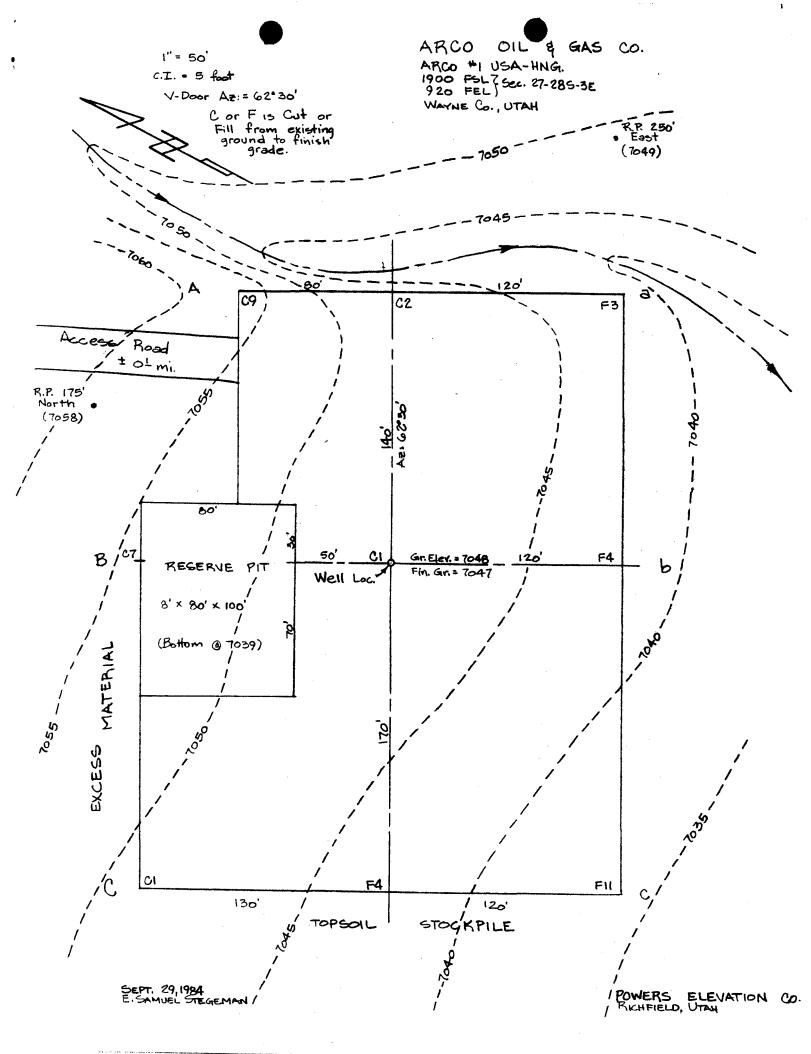
Date: SEPT. 29, 1984

Licensed Engineer State of COLORADO

No. "Utah exception

20596







#### POWERS ELEVATION

Gir. Elev. = 7048

ARCO OIL & GAS CO.

ARCO #1 USA-HNG.

1900 FSL > 27-285-5E

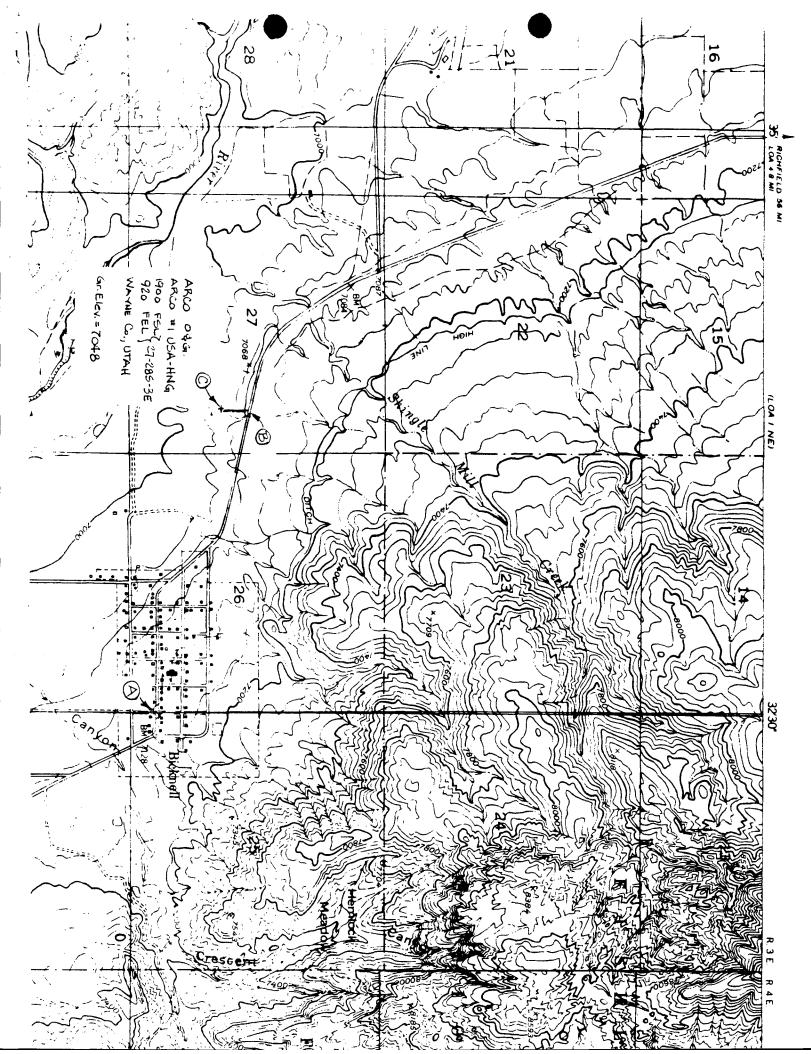
WAYNE CO, UTAH

Noutry primt.

Ergin in Bickrell, Utah (± 60 mi East of Richfield, Utah at U.S. Post Office and continue west on Utah Hwy #24 for 1.3 mi to equivalent mile marker 572 @ B;

Turn left onte flagged access cross country for <u>0.1 mi</u> to location (C).

Note: Need to install one 18" dia. CMP between \$\xi \in \text{for drainage.}



# UNITED STATES



Rotary

Form approved. Budget Bureau No. 42-R1425.

22. APPROX. DATE WORK WILL START

Nov. 26, 1984

CONFIDENTIAL DESIGNATION AND SERIAL NO. DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY U-52606 6. IF INDIAN, ALLOTTEE OR TRIBE NAME APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK 1a. TYPE OF WORK 7. UNIT AGREEMENT NAME PLUG BACK DEEPEN DRILL X N/A b. TYPE OF WELL MULTIPLE SINGLE X S. FARM OR LEASE NAME WELL X OTHER N/A 2. NAME OF OPERATOR ARCO Oil and Gas Co., A Division of Atlantic Richfield Company 9. WELL NO. ARCO #1 USA-HNG 3. ADDRESS OF OPERATOR 10. FIELD AND POOL, OR WILDCAT P.O. Box 5540, Denver, CO 80217 Wildcat 4. LOCATION OF WELL (Report location clearly and in accordance with 11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA 1900 FSL & 920 FEL (NE1/4 SE1/4) NUN At proposed prod. zone Sec. 27-T28S-R3E Approx. the same 14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST O 12. COUNTY OR PARISE | 13. STATE DIV. OF OIL GAS & Utah Wayne Approx. 1.3 miles west of Bicknell, Utah NO. OF ACRES IN LEASE NO. OF ACRES ASSIGNED 15. DISTANCE FROM PROPOSED\* TO THIS WELL LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drig, unit line, if any) 580 Not assigned 1917.88 18. DISTANCE FROM PROPOSED LOCATION®
TO NEAREST WELL DRILLING, COMPLETED,
OR APPLIED FOR, ON THIS LEASE, FT. 19. PROPOSED DEPTH 20. ROTABY OR CABLE TOOLS

23.PROPOSED CASING AND CEMENTING PROGRAM WEIGHT PER FOOT SETTING DEPTH QUANTITY OF CEMENT SIZE OF HOLE SIZE OF CASING 2003 Cmt to surf-approx 940 sx 13-3/8" 54.5#.K-55.STC 17-1/2" 24001 Cmt to surf-approx 890 sx 9-5/8" 12-1/4" 36.0 # K-55.STC7" Cmt to base of 9-5/8", approx 6100' 8-3/4" 23.0#,K-55,STC 340 sx

6100'

Propose to drill to 6100' to test the Kaibab, Cedar Mesa, & Redwall formations. This permit is being filed in accordance with Onshore Oil & Gas Order #1. This surveyed location does not meet State of Utah spacing regulations due to topographical conditions, therefore ARCO Oil & Gas Company requests an exception to State spacing due to topography. Attachments:

Drilling Program with Exhibits

21. ELEVATIONS (Show whether DF. RT. GR. etc.)

7048

Ground elevation:

Surface use program with Exhibits.

HNG Oil Company is the current lessee of record, however a Designation of Operator is attached. The access road is within the subject lease, therefore a Right-of-Way is not required.

For any questions concerning this subject please call Ms. Suzanne Barnes of our Drilling Department at (303)293-1077.

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout

preventer program. if any. 24.	//
SIGNED MINGLE COLLEGE FOR	Operations Managerate ////84
(This space for Federal or State office use)	
PERMIT NO.	APPROVED BY THE STATE
	OF UTAH DIVISION OF
APPROVED BY	TITLE OIL GAS AND MINING
CONDITIONS OF APPROVAL, IF ANY:	DATE: 11/8/84
	BY: John R. Base

\* Record GLO plat 194 BLM plat FORM F-106 EXHIBIT "B" • Corner Found () Field measure N CONFIDENTIAL 285 - 3E Found GLO 1935 B.c. w/rock pile & 4' steel post. **R**. 3 E (2631.99') Found GLO 1935 B.C. 2033.40+ 5266.80\* calc. Wrock pile 589° 54' W 79.80 ch\* @ Fence corner (Basis of bearing) E1 22 T286 1 28 27 R3E Gr. Elev. @ Loc. 1= 7048 @ R.P. 175' N = 7058 @ R.P. 250' E. = 7049 T. 28 S. (ARCO #1 USA-HNG) Found GLO 1935 F wrock pile Well 920 4 27 26 285-3E

Scale... I" = 1000'

Powers Elevation of Denver, Colorado
has in accordance with a request from Harry Engle
for ARCO OIL & GAS CO.
determined the location of ARCO #1 USA-HNG
to be 1900' FSL & 920' FEL of Section 27 Township 28 South
Range 3 East of the Salt Lake Meridian
Wayne County, Utah

I hereby certify that this plat is an accurate representation of a correct survey showing the location of

Date: SEPT. 29, 1984

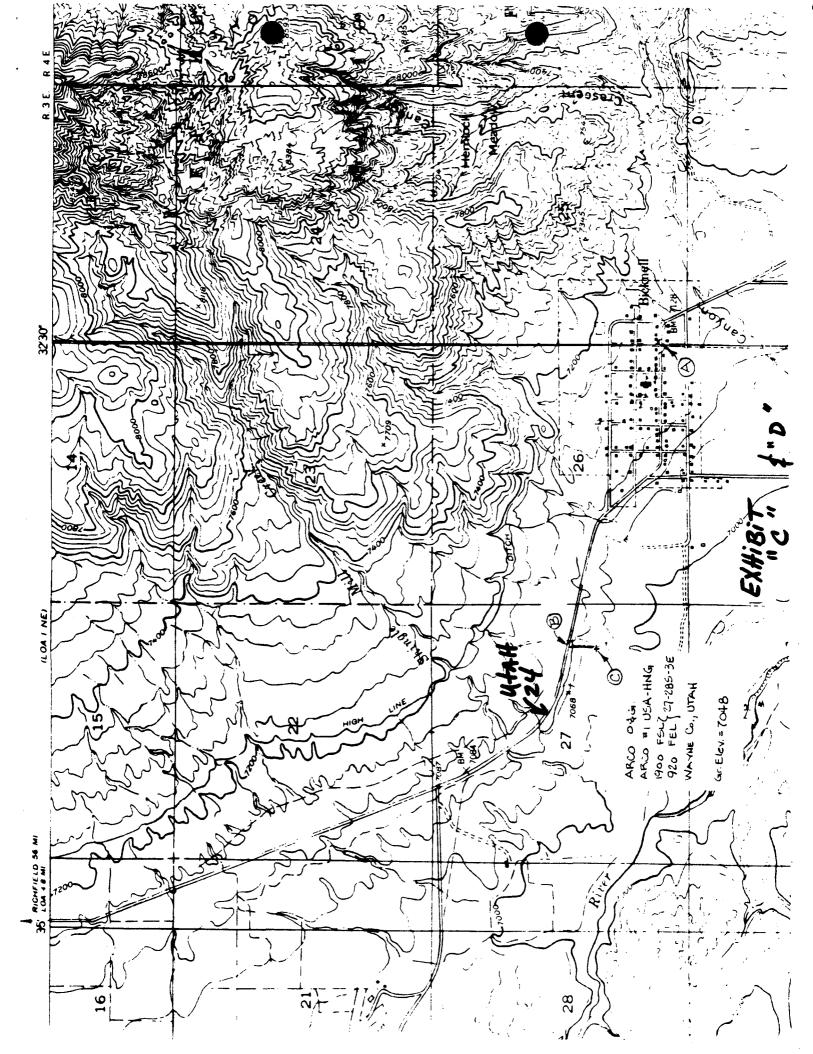
589° 34' W

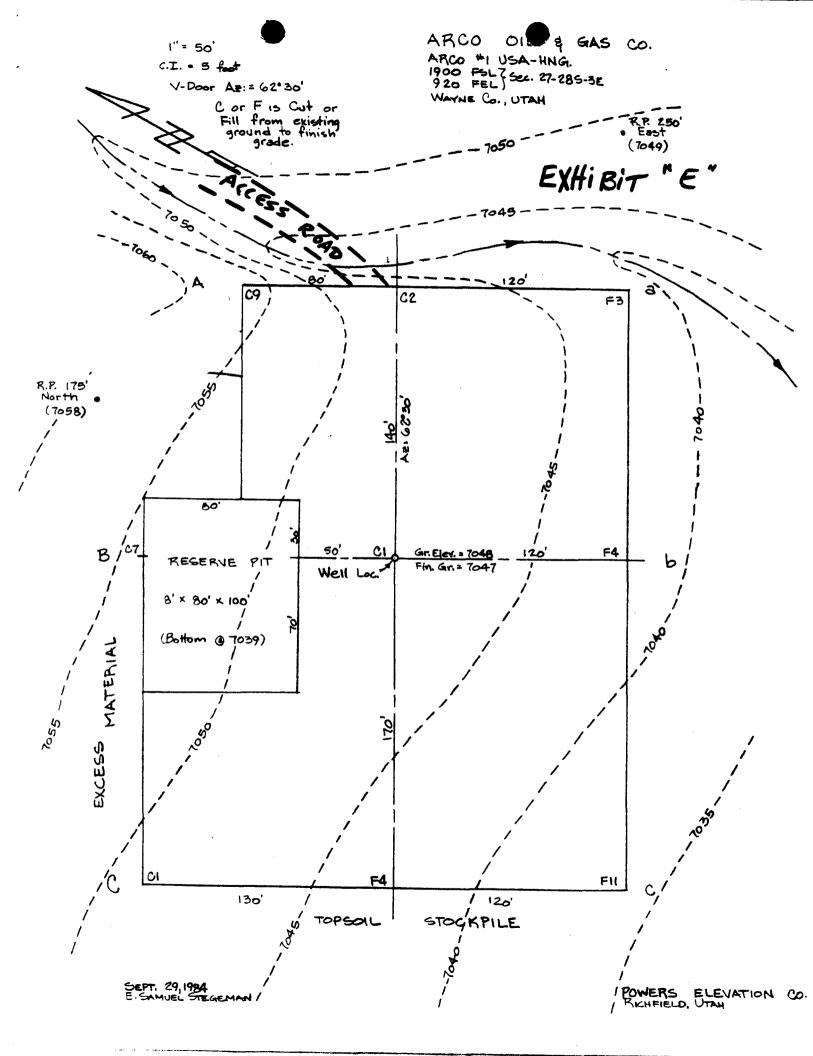
39.75 ch A

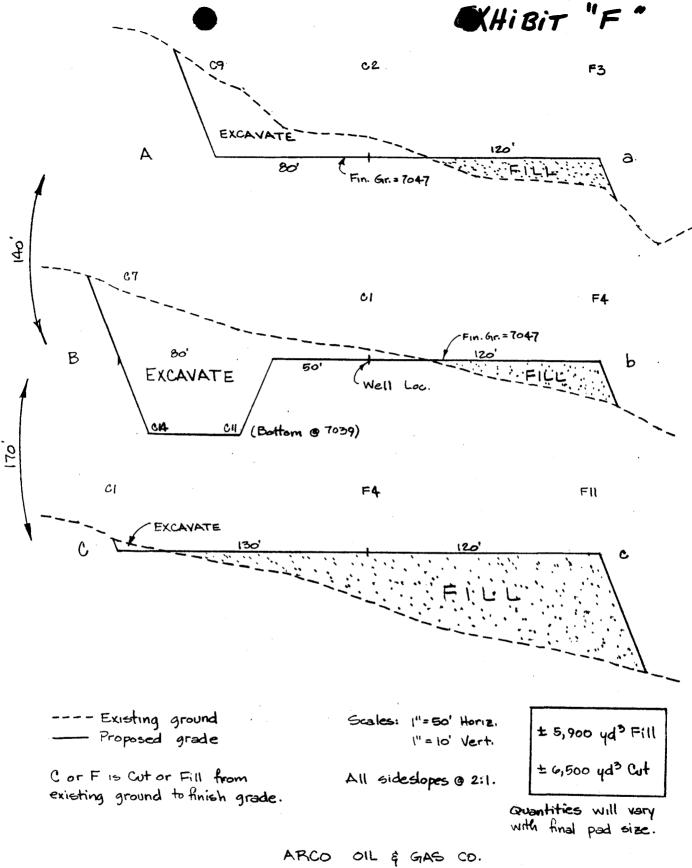
Licensed Engineer State of COLORADO "Un

589° 44' W 39.75 ch. △

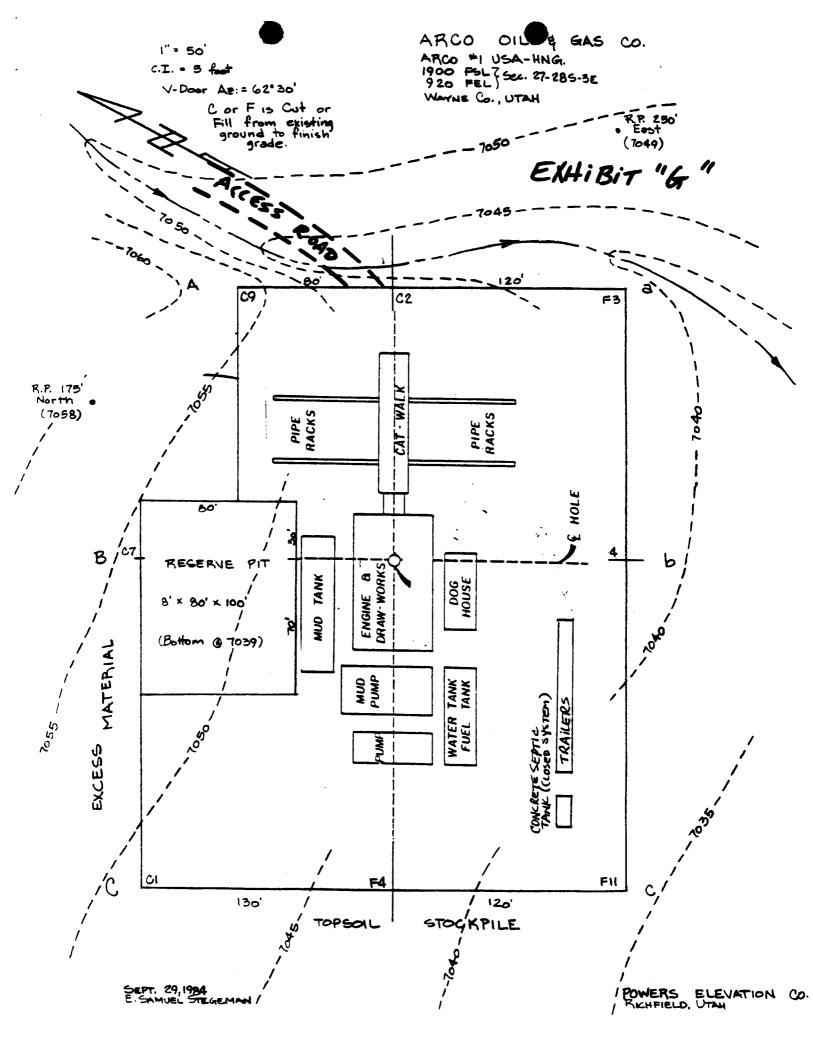
"Utah exception"







ARCO OIL & GAS CO. ARCO \*1 USA-HNG NE-SE 27-285-3E WAYNE CO., UTAH





(Submit in triplicate to appropriate Regional Oil and Gas or Mining Supervisor)

#### DESIGNATION OF OPERATOR

The undersigned is, on the records of the Bureau of Land Management, holder of lease

DISTRICT LAND OFFICE:

BLM - Salt Lake City, Utah 84111

SERIAL NO.:

U-52606

and hereby designates

ARCO Exploration Company

Name:

Exploration Operations - Western U.S.

Address:

707 17th Street, P. O. Box 5540

Denver, Colorado 80217

as his operator and local agent, with full authority to act in his behalf in complying with the terms of the lease and regulations applicable thereto and on whom the supervisor or his representative may serve written or oral instructions in securing compliance with the Operating Regulations with respect to (describe acreage to which this designation is applicable):

Township 28 South, Range 3 East Section 27: SE/4

It is understood that this designation of operator does not relieve the lessee of responsibility for compliance with the terms of the lease and the Operating Regulations. It is also understood that this designation of operator does not constitute an assignment of any interest in the lease.

In case of default on the part of the designated operator, the lessee will make full and prompt compliance with all regulations, lease terms, or orders of the Secretary of the Interior or his representative.

The lessee agrees promptly to notify the supervisor of any change in the designated operator.

HNG OIL COMPANY

72 Klut & Znay
(Signature of lessee)

Robert A. May, Agent & Attorrey-in-Fact P. O. Box 2267

October 11, 1984

(Date)

Midland, Texas 79702

(Address)

U.S. GOVERNMENT PRINTING OFFICE: 1964-0-726-354



OIL WELL ELEVATIONS - LOCATIONS ENVIRONMENTAL - ARCHAEOLOGICAL SERVICES 600 SOUTH CHERRY STREET, SUITE 1201 DENVER, COLORADO 80222-1767 PHONE NO. 303/321-2217

October 12, 1984

Mr. Harry Engle ARCO Oil & Gas Company P.O. Box 5540 Denver, CO 80217

Dear Mr. Engle:

Enclosed is the cultural resource survey report for the following ARCO Oil & Gas Company location:

ARCO #1 USA-HNG

A BLM Class-III pedestrian survey and an inspection of existing records were performed for this location by Powers Elevation. No cultural resources were found in the literature, pertinent site files, or during our field survey.

In view of this lack of cultural resources, we recommend that the proposed project be allowed to proceed.

If you have any questions regarding this report, please feel free to contact this office.

Sincerely,

Marcia J. Tate

Manager

Archaeology Department

MJT:kr

cc: BLM, Richfield District
BLM, Henry Mountain
State Archaeologist/SHPO
Mr. Richard Fike, BLM State
Archaeologist
Mr. Brian P. O'Neil, Powers
Elevation

# Cultural Resource Management Report

ARCO Oil & Gas Company
ARCO #1 USA-HNG
Wayne County, Utah

Lead Field Investigator

Brian P. O'Neil, M.A.

Principal Investigator

Marcia J. Tate

Date Oct. 15, 1984 For

ARCO Oil & Gas Company



# POWERS ELEVATION

CHERRY CREEK PLAZA, SUITE 1201 600 SOUTH CHERRY ST., DENVER, COLORADO 80222 (303) 321-2217

Archæology Division



A DIVISION OF PETROLEUM INFORMATION CORPORATION/A SUBSIDIARY OF A.C. NIELSEN COMPANY

Bureau of Land Management Utah State Office	Report Acceptable Yes No
Summary Report of Inspection for Cultural Resources	Mitigation Acceptable Yes No Comments:
1. Report Title   A   R   C   O     #   1     U   S   A   -   H   L	
2. Development Company <u>ARCO Oil &amp; Gas Co.</u>	40
3. Report Date [1]0   08   1   9   8   4   4   4   4   4   4   4   4   4	BLM-84-UT-54629; 4. Antiquities Permit No. State: U-84-5-113B.
5. Responsible Institution POWERSELL	E[V[A]T[I]O[N] County Wayne
6. Fieldwork Location: TWN 2 1851 Range	3 E   Section(s) [2 7] [
1,900' FSL, and TWN Range	70 71 72 73 74 76 76 77 
7. Resource Area [H[M] TWN [] Range	
PO: PONY EXPRESS. BR: BEAR RIVER, PR: PRICE RIVER, BC: BOOK CLIFFS HR: HOUSE RANGE, SE: SEVIER RIVER, HM: HENRY MOUNTAINS, BE: BEAVER RIVER, DX: DIXII KA: KANAB, ES: ESCAL ANTE. SJ: SAN JUAN, GR: GRAN SA: SAN RAFAEL, DM: DIAMOND MOUNTAIN,	## 102103 104105 106107 108109  ###################################
arepsilon . Description of Examination Procedures: $I$	A 10 acre survey area surrounding the well pad
center stake, was surveyed by walking a vals of 15 meters. Arroyo cuts, ant hil of buried cultural material. The access	series of parallel east-west transects at inter- lls, and animal burrows were examined for evidence road was surveyed by zig-zag transects 50 feet 100 foot wide R.O.W. approximately 200 feet long.
9. Linear Miles Surveyed [ ] ] ] ]   117	10. Inventory Type [I]
Definable Acres Surveyed 110.151 1 1 123  Legally Undefinable Acres	S=Reconnaisonce I=Intensive S=Statistical Sample
Surveyed (*A parcel hard to cadastrally locate i.e., icenter of si	ection)
11. Description of Findings (attach appendic No cultural resources were observed with project area.	ies, if appropriate) 12. Number Sites Found: 0   1   35   35   35   35   36   37   37   38   38   38   38   38   38
	13, Confection: Ny Yayes, Namo
14. Actual/Potential National Register Prope	rties Affected: None

15. Literature Search, Location/Cate: A file search was conducted on 10/01/84, at the BLM District Office in Richfield, Utah, see continuation sheet.

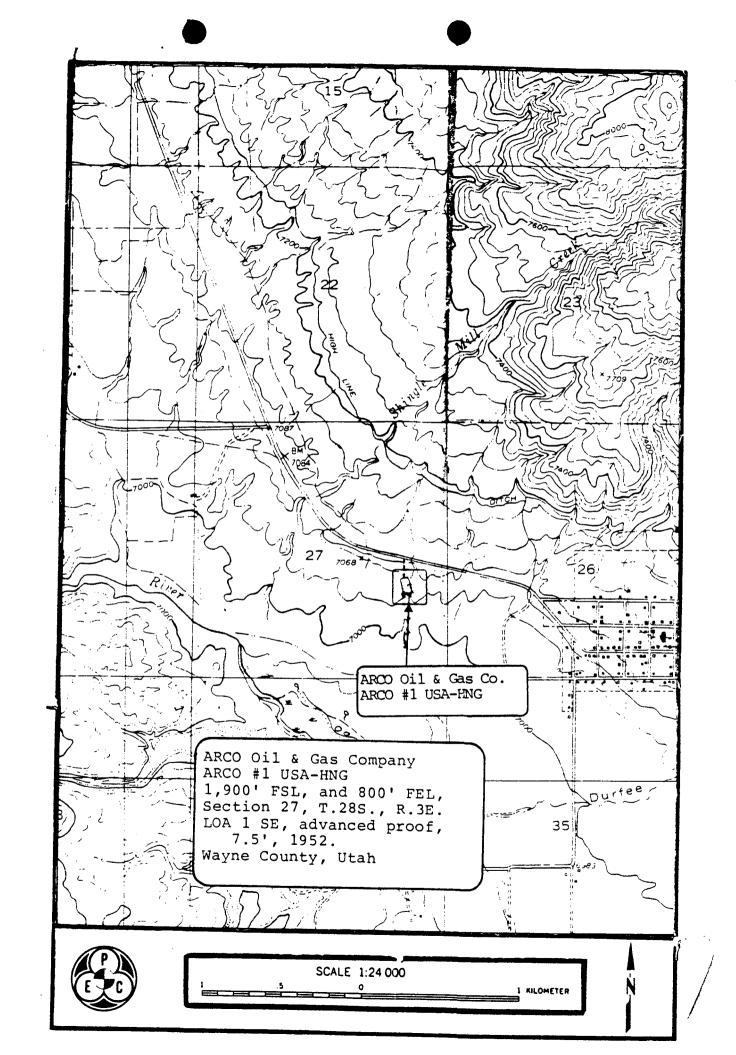
16. Conclusion/Recommendations: Due to the lack of cultural resources, we recommend that the project be allowed to proceed. Should buried cultural materials be encountered during the construction of the project, all work should cease and the BIM resource area archaeologist notified.

17. Signature

Brian O'Neil

ARCO Oil & Gas Company ARCO #1 USA-HNG Continuation Sheet

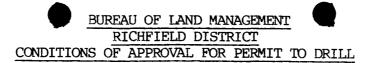
15. Literature Search, Location/Date: ....with Ms. Marian Rivette, BLM District Archaeologist. Two previous seismic surveys have been performed within the section. Survey #055-69-BYU, sites 42WN1400, 1401, & 1402 were recorded southwest of the project area. In addition, a portion of this project area was surveyed by Powers Elevation during seismic activities in October of 1982 as part of the Fishlake Phase III, Line #19 cultural resource inventory. Two sites, 42WN1414 and 1415 were recorded but are outside of the current project area. No sites have been previously reported within the project area. A files search requested on October 2, 1984, with the Division of State History (Utah State Historical Society) revealed no known sites nor previously conducted state permitted reconnaissnace projects in the area.



ARCO Oil & Gas Company ARCO #1 USA-HNG Section 27, T.28S., R.3E. 1,900' FSL, and 300' FEL, Wayne County, Utah



Looking southwest at center stake.



#### CONFIDENTIAL

Company: ARCO Oil & Gas Company

Well No.: ARCO #1 USA-HNG

Location: NE1/4 SE1/4, Sec. 27-T28S-R3E

Lease No.: IJ-52606

Onsite Inspection Date: October 23, 1984

All lease and/or unit operations will be conducted in such a matter that full compliance is made with applicable laws, regulations (43 CFR 3100), Onshore Oil and Gas Order No. 1, and the approved plan of operations. The operator is fully responsible for the actions of his subcontractors. A copy of these conditions will be furnished the field representative to ensure compliance.

#### A. DRILLING PROGRAM

#### 1. Surface Formation and Estimated Formation Tops:

Volcanics Carmel Navajo Chinle Shinarump Sinbad Kaibab	- Surface - 250' - 785' - 2335' - 2735' - 3575' - 3835'	White Rim Organ Rock Cedar Mesa Elephant Canyon Callville Molas Redwall TD	- 3985' - 4430' - 4545' - 4970' - 5420' - 5670' - 5720' - 6100'
--	---	--	---

# 2. Estimated depth at which oil, gas, water or other mineral-bearing zones are expected to be encountered:

#### Formation & Depth

Expected oil zones:

Kaibab @ 3835', Cedar Mesa @ 4545', Redwall

@ 5720'

Expected gas zones:

Kaibab @ 3835', Cedar Mesa @ 4545', Redwall

@ 5720'

Expected water zones:

Possible Navajo @ 785'

Expected mineral zones:

None anticipated

All fresh water and prospectively valuable minerals (as described by BLM at onsite) encountered during drilling will be recorded by depth, cased and cemented. All oil and gas shows will be tested to determine commercial potential.

#### 3. Minimum Specifications for Pressure Control:

Exhibit "A" is a schematic diagram of the blowout preventer equipment. The annular preventer will be tested to 1500 psi and the pipe and blind rams will be tested to 3000 psi upon nipple up. Pipe rams will be operationally checked each 24-hour period, as will blind rams and annular preventer each time pipe is pulled out of the hole. All checks of BOP will be noted on Daily Drilling Reports. Accessories to BOP equipment will include an upper and lower kelly cock, a floor safety valve, a drill string BOP, and a choke manifold with pressure rating equipment equal to the BOP stack.

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Choke manifold and safety valves will be pressure tested to 3000 psi upon nipple-up. Exhibit "A" also shows the proposed Accumulator Unit and Choke Manifold. Hydraulic controls for BOPE will be located at the Accumulator Unit with hand wheel back-up.

BOP systems will be consistent w/API RP 53. Pressure tests will be conducted before drilling out from under all casing strings which are set and cemented in place. Blowout preventer controls will be installed prior to drilling the surf csg plug & will remain in use until the well is completed or abandoned. Preventers will be inspected & operated at least daily to ensure good mechanical working order, & this inspection recorded on the daily drilling report. Preventers will be pressure tested before drilling casing cement plugs. The Resource Area will be notified 48 hours in advance when pressure tests are to be conducted.

#### 4. Proposed Casing Program:

						Section Size	
	Hole					Weight,Grade	New/
Casing	Size	<u> </u>	nterval	Length	OD	Connection	<u>Used</u>
Conductor 20" conductor will be set @ 60' GL w/a dry hole digger & cmt'd to surf w/± 5.0 yd <sup>3</sup> of redimix.						surf	
Surface	17-1/2"	0	- 800'	800 <b>'</b>	13-3/8"	54.5#,K-55,S	IC New
Intermediate	e 12-1/4"	0	- 2400'	2400	9-5/8"	36.0#,K-55,S	IC New
Production	8-3/4"	0	- 6100'	6100'	7 <b>"</b>	23.0#,K-55,S	IC New
Cement Prog	ram:						
Surface Cas	ing:	Omt t be ci	o surf w, .rc to sur	/±940 sx	Cl "H" w/	2% CaCl <sub>2</sub> + add. pg,yield:1.54f	Cmt to t <sup>3</sup> /sx.
Intermediato	e Csg:	1.84	ft <sup>3</sup> /sx fo 1 @ 15.5 p	oll'd by	200 sx Cl	ed @ 12.7 ppg, "H" w/2% CaCl <sup>3</sup> /sx.Cmt to be	& add
Production (	Csg:	1.84 & add	$ft^3/sx$ ,	foll'd by 15.5 ppg	230 sx C	d @ 12.7 ppg, y 1 "H" omt w/2% .22 ft <sup>3</sup> /sx. Es	CaCl <sub>2</sub>
			: Hole com			ate type & per	centage
All potentia	All potentially productive hydrocarbon zones will be cmt'd to prevent						

All potentially productive hydrocarbon zones will be cmt'd to prevent communication. Actual production csg cmt volumes will be based upon caliper log plus 15%-20% excess.

Anticipated cmt tops will be reported as to depth, not the expected number of sacks. The Resource Area will be notified 48 hrs in advance when running casing strings and cement.

CONFIDENTIAL

ARCO Oil & Gas Company ARCO #1 USA-HNG NE1/4 SE 1/4, Sec. 27-T28S-R3E Wayne County, Utah

#### 5. Type and Characteristic of Proposed Drilling Fluids:

Mud system will be gel-chemical for the surface hole with adequate stocks of sorptive agents on site to handle possible spills of fuel and oil on the surface. Adequate mud materials will be stockpiled on location to completely rebuild entire mud system volume (surface volume + hole volume). Surface volume estimated at ±500 bbls. An Air-Airmist system will be used below the surface casing and may be converted to a Low Solids non-dispersed mud if hole conditions dictate.

Depth	Type	Weight #/gal.	Visc. sec/qt.	Fluid <u>Loss</u>
0'- 800'	Fresh water gel, lime, spud mud	8.3-8.6	30-40	No control
TTD (008	Air-Airmist; maybe converted to LSND if hole conditions dictate	8.8-9.0	<b>35–4</b> 5	15 cc

A shale shaker, desander, and desilter will be utilized to aid in solids control when drilling with mud.

Blooie line will be misted to reduce fugitive dust when air drlling.

#### 6. Coring, Logging, and Testing Program:

- a. Coring: Four 60' cores in intervals selected by wellsite geologist (possible Kaibab, Cedar Mesa, Redwall).
- b. DSTs: Four open hole DSTs are planned in intervals selected by wellsite geologist.
- c. Logging as follows:

Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (Form 3160-4) will be submitted to the District Office not later than thirty (30) days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3164. Two copies of all logs, core descriptions, core analyses, well test data, geologic summaries, sample description, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, will be filed with Form 3160-4. Samples (cuttings, fluids, and/or gases) will be submitted when requested by the Richfield District Manager.

#### 7. Abnormal Conditions, Bottom Hole Pressures and Potential Hazards:

No abnormal pressures or temperatures have been noted or reported in wells drilled in the area nor at the depths anticipated in this well. H<sub>2</sub>S is not anticipated at any depths in this well.

#### CONFIDENTIAL.

#### 8. Anticipated Starting Dates and Notifications of Operations:

The operator will contact the Henry Mountain Resource Area at (801)542-3461, forty-eight (48) hours prior to beginning any dirt work on this location.

No location will be constructed or moved, no well will be plugged, and no drilling or workover equipment will be removed from a well to be placed in a suspended status without prior approval of the District Manager. If operations are to be suspended, prior approval of the District Manager will be obtained and notification given before resumption of operations.

The spud date will be reported orally to the Area Manager (Richfield District at 801-896-8221) within a minimum of twenty-four (24) hours prior to spudding. Written notification in the form of a Sundry Notice (Form 3160-5) will be submitted to the District Office within twenty-four (24) hours after spudding. If the spudding occurs on a weekend or holiday, the written report will be submitted on the following regular work day.

In accordance with Onshore Oil and Gas Order No. 1, this well will be reported on Form 9-329, "Monthly Report of Operations", starting with the month in which operations commence and continue each month until the well is physically plugged and abandoned. This report will be filed directly with the BLM Richfield District Office, 150 E. 900 N., Richfield, Utah 84701.

Immediate Report: Spills, blowouts, fires, leaks, accidents, or any other unusual occurrences shall be promptly reported to the Resource Area in accordance with requirements of NTL-3A.

If a replacement rig is contemplated for completion operations, a "Sundry Notice" (Form 3160-5) to the effect will be filed for prior approval of the District Manager, all conditions of this approval plan are applicable during all operations conducted with the replacement rig. In emergency situations, verbal approval to bring on a replacement rig will be approved by the District Petroleum Engineer.

Should the well be successfully completed for production, the District Manager will be notified when the well is placed in a producing status. Such notification will be sent by telegram or other written communication, not later than five (5) business days following the date on which the well is placed on production.

A first production conference will be scheduled within fifteen (15) days after receipt of the first production report. The Resource Area Office will coordinate the field conference.

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No well abandonment operations will be commenced without the prior approval of the District Manager. In the case of newly drilled dry holes or failures, and in emergency situations, oral approval will be obtained from the District Petroleum Engineer. A "Subsequent Report of Abandonment" (Form 3160-5) will be filed with the District Manager within thirty (30) days following completion of the well for abandonment. This report will indicate where plugs were placed and the current status of surface restoration. Final abandonment will not be approved until the surface reclamation work required by the approved APD or approved abandonment notice has been completed to the satisfaction of the Area Manager or his representative, or the appropriate surface managing agency.

Approval to vent/flare gas during initial well evaluation will be obtained from the District Office. This preliminary approval will not exceed 30 days or 50 MMCF gas. Approval to vent/flare beyond this initial test period will require District Office approval pursuant to guidelines in NTL-4A.

Upon completion of approved plugging, a regulation marker will be erected in accordance with 43 CFR 3162.6. The marker will be constructed as follows: According to regulations. The top of the marker will be closed or capped.

The following minimum information will be permanently placed on the marker with a plate, cap or beaded—on with a welding torch:

"Fed" or "Ind", as applicable. "Well number, location by 1/4 1/4 section, township and range". "Lease number". "Operator".

Other: The anticipated spud date is November 26, 1984. ARCO Oil & Gas Company has in effect a \$150,000 Nation Wide Drilling Bond (#7943391) to cover drilling operations on all Federal lands. ARCO Oil & Gas Company is the current lessee of record on the subject lease.

#### CONFIDENTIAL

#### B. SURFACE USE PLAN

#### 1. Existing Roads:

- a. The location is approximately 1.3 miles west of Bicknell, Utah. The proposed wellsite and elevation plat are shown as Exhibit "B". Staking included two directional reference stakes.
- b. Exhibit "C" describes the route to location. From Bicknell, Utah take Hwy 24 1.3 miles west towards Loa, turn left and go 0.1 miles to location.
- c. There will not be any improvements or maintenance to existing roads. Exhibit "D" shows all roads near the location.

#### 2. Planned Access Roads to be Constructed:

- 1. Width will be 18' (top surface).
- 2. Maximum grade will be 8%.
- 3. There are no major cuts or fills.
- 4. Turnouts are not required.
- 5. The access road will be designed to ensure proper drainage, it is centerline flagged from the county road.
- 6. One  $18" \times 30"$  culvert is required on the access road approximately 50" from the location.
- 7. There will not be any fence cuts.
- 8. All surfacing material will be from materials located at the access road. No additional surface material will be required.
- 9. There are no existing facilities on the proposed location.
- 10. Road construction will be in conformance to Class III road standards.

Surface disturbance and vehicular travel will be limited to the approved location and access road. Any additional area needed will be approved by the Area Manager in advance.

The access road will be rehabilitated or brought to Resource (Class III) Road Standards within sixty (60) days of dismantling of the drilling rig. If this time frame cannot be met, the Area Manager will be notified so that temporary drainage control can be installed along the access road.

Surfacing material will not be placed on the access road or location without prior BLM approval.

Six (6) inches of topsoil will be saved along the access road route and stockpiled separately so that it may be replaced should the access road be reclaimed.

#### CONFIDENTIAL

Drainages shall not be plugged by road bed. Drainage crossings shall be constructed so as not to cause siltation or accumulation of debris. Where siltation or accumulation of debris occurs the drainage crossing shall be reworked or relocated.

#### 3. Location of Existing Wells:

- 1. Water wells none.
- 2. Injection wells None
- 3. Disposal wells None
- 4. Producing wells None
- 5. Drilling wells None
- 6. Temporarily abandoned wells None
- 7. Abandoned wells None
- 8. Shut-in wells None
- 9. Monitoring or observation wells None

#### 4. Location of Tank Batteries and Production Facilities:

All permanent (onsite for six (6) months or longer) structures constructed or installed (including oil well pump jacks) will be painted a flat, nonreflective, earth tone color to match the standard environmental colors, as determined by the Rocky Mountain Five-State Interagency Committee. All facilities will be painted within six (6) months of installation. Facilities required to comply with the Occupational Safety and Health Act (OSHA) may be excluded. Colors will be as follows:

per Rocky Mountain Five State Interagency Committee

If a tank battery is constructed on this lease, it will be surrounded by a dike of sufficient capacity to contain 1-1/2 times the storage capacity of the battery.

All loading lines and valves will be placed inside the berm surrounding the tank battery.

All site security guidelines identified in 43CFR 3162.7 regulations will be adhered to.

All off-lease storage, off-lease measurement, or commingling on-lease or off-lease will have prior written approval from the District Manager.

All product lines entering and leaving hydrocarbon storage tanks will be effectively sealed.

Gas meter runs for each well will be located within five hundred (500) feet of the wellhead. The gas flowline will be buried from the wellhead to the the meter along with any other sections occurring on the pad. Meter runs will be housed and/or fenced.

#### CONFIDENTIAL

The oil and gas measurement facilities will be installed on the well location. The oil and gas meters will be calibrated in place prior to any deliveries. Tests for meter accuracy will be conducted monthly for the first three (3) months on new meter installations and at least quarterly thereafter. The Area Manager will be provided with a date and time for the initial meter calibration and all future meter-proving schedules. A copy of the meter calibration reports will be submitted to the Resource Area Office. All meter measurement facilities will conform with the API standards for liquid hydrocarbons and the AGA standard for natural gas measurement.

ARCO Oil & Gas Company does not own or operate any facilities within a one-mile radius of the proposed location. This well is a wildcat. If the well is a producer, a Sundry Notice will be filed describing all proposed production facilities.

#### 5. Location and Type of Water Supply:

A. All water needed for drilling purposes will be obtained from:

Fremont Irrigation Company Contact: Dudley Brian at (801) 836-2775 Water location is at the Spring Creek, approx. 1 block west of Loa, Utah.

A temporary water use permit for this operation will be obtained from the Utah State Engineer & Fremont Irrigation Company. Water obtained on private land, or land administered by another agency, will require aproval from the owner or agency for use of the land. An approved temporary water use permit will be filed under a separate letter.

- B. Water trucks will be used to haul water to location.
- C. No water well will be drilled.
- D. No water will be taken off Federal lands.

#### 6. Source of Construction Material:

Pad construction material will be obtained from cut material located onsite. No material will be taken from lands other than the proposed location.

The use of materials under BLM jurisdiction will conform to 43 CFR 3610.2-3. Source of construction material will be located on lease.

#### 7. Methods of Handling Waste Disposal:

The reserve pit will not be lined unless at time of construction it is deemed necessary by a BLM authorized officer, if so, the reserve pit will be lined prior to spud.

### CONFIDENTIAL

Three sides of the reserve pit will be fenced before drilling starts. The fourth side will be fenced as soon as the drilling is completed. The fence will be kept in good repair while the pit is drying. The fence will be four strands of barb wire.

All trash must be contained in a portable wire cage and disposed of at a sanitary landfill. No burning will take place. Operator will be responsible for trash and roadside litter generated by their operation along their access route; from the main highway (Utah 24) to the location. In the event a burn permit is aquired, the operator will dispose of non-burnable items by using the portable trash cage.

Produced waste water will be confined to a lined pit for a period not to exceed ninety (90) days after initial production. During the ninety (90) day period, an application for approval of a permanent disposal method and location, along with the required water analysis, will be submitted for the District Manager's approval pursuant to Onshore Oil and Gas Order No. 3 (NTL-2B).

Drill cuttings will be buried in the reserve pit. Drilling fluids will be handled and disposed of in the reserve pit. Any fluids produced during drilling test or while making production test will be collected in a test tank. Any spills of oil, gas, salt water or other noxious fluids will be cleaned up and removed.

Chemical toilet facilities will be provided for human waste. Garbage and non-flammable waste will be handled in a closed wire cage. Drill fluids, water, drilling mud and tailings will be kept in reserve pit.

After the rig moves out, all materials will be cleaned up and no adverse materials will be left on location. All dangerous open pits will be fenced during drilling and kept closed until such time as the pit is leveled.

#### 8. Ancillary Facilities:

Living facilities will be required. They will be located onsite. Three (3) or four (4) trailers will be on location, they will be equipped with concrete septic tanks (closed system). The septic tanks will be pumped as required. No waste will be disposed of on location. The closed concrete septic tank will conform to local health regulations.

#### 9. Well Site Layout:

The reserve pit will be located on the north side of location. Exhibit "E" is drillsite location as staked. Exhibit "F" shows planned cuts and fills.

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The top 6" of soil material will be removed from the location and stockpiled separately off the location on the West side. This stockpile will contain approximately 1500 yds<sup>3</sup>. Topsoil along the access road will be reserved in place adjacent to the road. If inadequate topsoil is stockpiled, the operator will bring in suitable material from outside sources at his expense.

Access to the well pad will be from Utah 24 to the north side of the location. The access road is centerline flagged from the county road.

A portable trash pit will be allowed on location.

Exhibit "G" is a diagram of the rig and equipment.

#### 10. Plans for Restoration of Surface

Immediately upon completion of drilling, the location and surrounding area will be cleared of all remaining debris, materials, trash and junk not required for production. Before any dirt work to restore the location takes place, the reserve pit must be completely dry.

The operator or his contractor will notify the Henry Mountain Resource Area (Hanksville) at (801)542-3461 forty-eight (48) hours before starting reclamation work that involves earthmoving equipment and upon completion of restoration measures.

Before any earthwork to restore the location takes place, the reserve pit will be dry and all trash (barrels, metal, etc.) it contains must be removed from public lands. Any dispersal of clarified drilling mud/drilled fluids over the drill location is subject to the approval of the authorized officer.

The pit will be drained into a network of trenches 2" to 3" feet wide and a minimum of 4' deep and covered with earth (not the stockpiled topsoil). All trash contained in the pit (barrels, metal, etc.) must be removed from public lands. Recontouring of the location and pit can be started immediatly.

The stockpiled topsoil will be evenly distributed over the disturbed areas.

All disturbed areas will be recontoured to blend as nearly as possible with the surrounding area.

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All disturbed areas will be scarified with the contour to a depth of 8-12 inches. Do not smooth pads out, leave a roughened surface.

Seed will be broadcast or drilled as soon as possible upon completion during a period as specified by the BLM authorized officer with the attached seed prescription. Seeding will be repeated until vegetation is successfully established. Seeding will be done in presence of the authorized officer.

After seeding is complete, the stockpiled sagebrush will be scattered evenly over the disturbed area and walked down with a dozer. The access will be blocked to prevent ingress and egress of vehicular traffic.

The following seed mixture will be used on the access road and location:

1.	Palmers Penstamian	2	1bs/acre
2.	Crested Wheatgrass	2	1bs/acre
3.	Intermediate Wheatgrass	4	lbs/acre
4.	Antelope Bitterbrush	2	lbs/acre
5.	Blue Gramma	4	lbs/acre
6.	Louis Flax	2	lbs/acre

The reserve pit and that portion of the location and access road not needed for production or production facilities will be reclaimed. The time required to complete the reclamation will depend upon the area to be reclaimed. ARCO Oil and Gas Company agrees to begin reclamation as soon as weather conditions are suitable and further agrees to complete the project in a timely manner.

#### 11. Surface and Mineral Ownership:

The location surface and mineral rights are both Federal, administered by the  ${\sf BLM}_{\bullet}$ 

#### 12. Other Information:

For any questions regarding this permit, please contact Mr. Harold Engel of our Drilling Department at (303)293-7305, or Ms. Suzanne Barnes at (303)293-1077.

#### CONFIDENTIAL

There will be no deviation from the proposed drilling and/or workover program without prior approval from the District Manager. Safe drilling and operating practices must be observed. All wells, whether drilling, producing, suspended, or abandoned, will be identified in accordance with 43 CFR 3162.2.

"Sundry Notice and Report on Wells" (Form 3160-5) will be filed for approval for all changes of plans and other operations in accordance with 43 CFR 3164.

The dirt contractor will be provided with an approved copy of the surface use plan, and any additional BLM stipulations prior to any work.

If any cultural material is exposed during construction, all work will stop and the BLM Resource Area Office will be contacted. A copy of the cultural resource report prepared by Powers Elevation is attached as Exhibit "I".

All employees working in the area will be informed by the operator that they will be subject to prosecution for disturbing archaeological sites or picking up artifacts. Salvage or excavation of identified archaelogical sites will only be done if damage occurs.

This permit will be valid for a period of one (1) year from the date of approval. After permit termination, a new application will be filed for approval for any future operations.

#### 13. Lessee's or Operator's Representative and Certification:

Larry Morse
ARCO Oil and Gas Company
P. O. Box 5540
Denver, Colorado 80217
Bus. Tele: (303) 293-7031

J. M. McCarthy
ARCO Oil and Gas Company
P. O. Box 5540
Denver, Colorado 80217
Bus. Tele: (303) 293-7127
Res. Tele: (303) 293-1339

# CONFIDENTIAL

#### Certification:

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route; that I am familiar with the conditions which currently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and, that the work associated with the operations proposed herein will be performed by ARCO Oil and Gas Company and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

Operations Manager

ARCO Oil and Gas Company

#### CONFIDENTIAL

The onsite inspection was held 10/23/84

PARTICIPANTS:

TITLES:

Harold R. Engel

Drilling Engineer, ARCO Oil & Gas

Company

Leonard Henney

Ross Construction Company

Patrick Sto**ng** Ray Blaisdell Verl Christenson

BLM BLM

BLM

District Office contact is John Branch

Office phone: (801)896-8221

City: Richfield

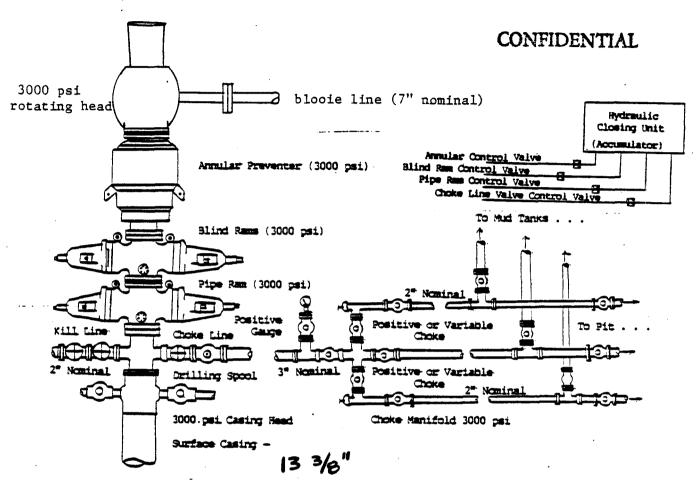
State: Utah

Resource Area Manager's address and contacts are:

Address: P.O. Box 99, Hanksville, Utah 84734

Your contact is: Patrick Stong Office phone: (801)542-3461

#### EXHIBIT "A" Well Control Equipment 3M-10-SRRA



- All BOF equipment shall be fluid and/or mechanically operated.
- 2. BOP's and all fittings will be in good working condition and rated at 3000 psi W.P. minimm.
- Equipment through which bit must pass shall be at least as large as casing size being drilled.
- 4. Nipple above BOP shall be at least same size as casing being set.
- 5. Opper Kelly Cock and lower Kelly Cock shall be 3000 psi W.P. minimum.
  6. Ploor safety valve (full opening) and drill string 30P with appropriate rated pressure shall be available on rig floor with connections or subs to fit any tool joint in string.
- 7. Minimum size for choke line shall be 3 inches nominal diameter, minimum size for vent lines downsteam of chokes shall be 2 inches nominal, and vent line which by passes shall be a minimum of 3 inches nominal and shall be as straight as possible.
- 8. Fluid lines from accumulator to BCP's and all remote control fluid lines shall be steel and rated at or above maximum accumulator pressure. Lines shall be bundled and protected from damage.
- 9. Rams will be used in following positions: (ARCO Drl. Supv. may reverse ram location)

Running Casing Upper Ram. Blind Blind Lower Ram Drillpipe Casing Rams

- 10. Minimum size for kill line is 2 inches nominal.
- 11. Extensions and hand wheels shall be installed.

#### ALL SPECIFICATIONS LISTED ARE PER API-RP53

# • CONFIDENTIAL.

OPERATOR area Oil & Gas		DATE 11-6-84
WELL NAME Cheo #1 USA-H,	N6	
SEC NE SE 27 T 285	R 3E COUNTY	Wayne
43-055-30037 API NUMBER	TYPE	OF LEASE
CHECK OFF:		
PLAT	BOND	NEAREST WELL
LEASE	FIELD	POTASH OR OIL SHALE
PROCESSING COMMENTS: The other wills withing	i 1000' - Efleptio	à requestes
ned water planit	/	
APPROVAL LETTER:		
SPACING: A-3 UNIT	c-3-a	CAUSE NO. & DATE
c-3-b	C-3-C	
STIPULATIONS: 1- Water		



Scott M. Matheson, Governor Temple A. Reynolds, Executive Director Dianne R. Nielson, Ph.D., Division Director

4241 State Office Building • Salt Lake City, UT 84114 • 801-533-5771

November 8, 1984

Arco Oil and Gas Company P.O. Box 5540 Denver, Colorado 80217

#### Gentlemen:

Re: Well No. Arco #1 USA-HNG - NE SE Sec. 27, T. 28S, R. 3E 1900'FSL, 920'FEL - Wayne County, Utah

Approval to drill the above referenced oil well is hereby granted in accordance with Rule C-3(c), General Rules and Regulations and Rules of Practice and Procedure, subject to the following stipulations:

 Prior to commencement of drilling, receipt by the Division of evidence providing assurance of an adequate and approved supply of water.

In addition, the following actions are necessary to fully comply with this approval:

- 1. Spudding notification to the Division within 24 hours after drilling operations commence.
- 2. Submittal to the Division of completed Form OGC-8-X, Report of Water Encountered During Drilling.
- Prompt notification to the Division should you determine that it is necessary to plug and abandon this well. Notify John R. Baza, Petroleum Engineer, (Office) (801) 533-5771, (Home) 298-7695 or R. J. Firth, Associate Director, (Home) 571-6068.
- 4. Compliance with the requirements and regulations of Rule C-27, Associated Gas Flaring, General Rules and Regulations, Oil and Gas Conservation.

Page 2 Arco Oil and Gas Company Well No. Arco #1 USA-HNG November 8, 1984

5. This approval shall expire one (1) year after date of issuance unless substantial and continuous operation is underway or an application for an extension is made prior to the approval expiration date.

The API number assigned to this well is 43-055-30037.

Sincerely,

Associate Director, Oil & Gas

as

Enclosures

cc: Branch of Fluid Minerals

Noted Lemm



## United States Department of the Interior

BUREAU OF LAND MANAGEMENT RICHFIELD DISTRICT OFFICE 150 EAST 900 NORTH RICHFIELD, UTAH 84701

IN REPLY REFER TO: 31 00 (U-052)

April 3, 1986

Mr. J. M. McCarthy Area OIT and Gas Co.

P O Box 5540
Denver, Colorado 80217

Re: Oil and Gas Well

Arco #1 USA-Hng Lease U-52606

T. 28 S., R. 3 E., Sec. 27

Dear Mr. McCarthy:

On November 20, 1984, an application for permit to drill (APD) was approved for the above referenced well. The approval period in which to begin drilling operations for this well, as referenced in the approved APD, was for 1 year from the date of approval. Drilling operations were never initiated for this well, and the approval period expired on November 20, 1985. Approval to drill this well is hereby rescinded. Should you desire to drill this well at some future date, a new APD must be submitted.

Sincerely,

Ponald J. Vendlelon Donald L. Pendleton District Manager

cc: U-922 ✓ HMRA



Norman H. Bangerter, Governor Dee C. Hansen, Executive Director Dianne R. Nielson, Ph.D., Division Director

355 W. North Temple • 3 Triad Center • Suite 350 • Salt Lake City, UT 84180-1203 • 801-538-5340

April 9, 1986

Arco Oil and Gas Company P.O. Box 5540 Denver, Colorado 80217

Gentlemen:

RE: Well No. Arco #1 USA-HNG, Sec.27, T.28S, R.3E, Wayne County, Utah, API NO. 43-055-30037

In concert with action taken by the U.S. Bureau of Land Management, approval to drill the above referenced well is hereby rescinded. A new Application for Permit to Drill must be filed with this office for approval, <u>prior</u> to future drilling of the subject location.

If any previously unreported operations have been performed on this well location, it is imperative that you notify the Division of Oil, Gas and Mining immediately.

Sincerely,

John R. Baza

Petroleum Engineer

sb

cc: BLM-Richfield

D. R. Nielson R. J. Firth

Well file

0278T-28